

DESCRIPTION OF A NEW SPECIES OF XYLOMIGES FROM CALIFORNIA

WITH NOTES AND ILLUSTRATIONS

(LEPIDOPTERA: NOCTUIDAE: HADENINAE)

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IT IS MY PLEASURE at this time to present a description of an undescribed noctuid species of the genus *Xylomiges* Guenee. This species has been in the Bauer-Buckett collection for well over ten years now, and in the interim many specimens have accumulated. This species has a peculiar flight habit, and because of this characteristic, males of the species were never taken until relatively recent times. The females come out in the evenings, usually between 7:30 P.M. and 8:00 P.M., and can be secured until 10:00 P.M. on normal nights. The males have never been taken before 10:00 P.M., and become abundant about 11:00 P.M. and later on normal occasions. The temperatures along the coast are cool in the early part of the year (January and February), and the humidity is very high, and therefore, collectors seldom would stay out until 10:00 P.M. collecting. Because of this factor, males were never taken until recently when colleagues and I remained out all night collecting.

The type locality is a typical coastal Pine belt vegetation, the dominant tree being Bishop Pine (*Pinus muricata* Don.). Madrone (*Arbusus menziesii* Pursh.), Tanbark (*Lithocarpus densiflorus* (H. & A.)), California Laurel (*Umbellularia californica* (H. & A.)), and Coast Live Oak (*Quercus agrifolia* (Nee.)), are other common trees of the area. Common shrubs of the area are various species of *Ceanothus*, Coyote bush (*Baccharis pilularis* DC.), Manzanita (*Arctostaphylos* spp.), Huckleberry



Fig. 1—Map depicting the distribution of *Xylomiges baueri* Buckett and *X. variabilis* (Smith). Note the restricted distribution of *baueri*.

(*Vaccinium* spp.), and Salmon-berry (*Rubus spectabilis* Pursh.). Many other smaller herbaceous plants abound also. While in the company of Mr. Bill Bauer and Mr. Chris Henne, search for the eggs and larvae was done. The only larva we found that resembled one of the *Xylomiges* species was one found in the tip of staminate cone of a young Bishop Pine. The larva was in an intermediate instar, and as yet has not emerged (according to Mr. Chris Henne who is rearing the specimen). It seems probable that Bishop Pine will prove to be the host plant of this new species. *Xylomiges variabilis* Smith, the closest relative to *Xylomiges baueri* n. sp., is a pine feeder, and thus, this is the reason for suspecting Bishop Pine in this case.

XYLOMIGES BAUERI n. sp.

Male: Ground color of primaries dorsally maroon, secondaries dorsally with pink tint. Head with vertex clothed in tricolor, elongate hairs, basally brown, subapically maroon, apically white-tipped; frons clothed as in vertex, for most part, but with more maroon elongate hairs; maxillary palpi exterolaterally brownish, ventrally possessing elongate white-tipped maroon hairs; proboscis normal; eyes very hairy; antennae with scape and pedicel clothed in whitish and maroon scales and hairs; flagellomeres bipectinate-fasciculate, pectinations becoming shorter apically, terminally ciliate. Thorax with collar maroon, composed of elongate white-tipped hairs; disc and tegulae clothed in brown, maroon, white-tipped dentate hairs; ventrally clothed in maroon and whitish elongate hairs; tarsi black and white banded; unguis very weakly bifid; primaries dorsally maroon; basal line bicolor, basally black, apically irrorated with white scales so as to appear grey, or blue-grey; transverse anterior line uneven in course, bicolor, basally blue-grey, apically black; median area blackish on inner margin, remainder maroon; orbicular squarish, grey, centrally blackish, outlined with light colored scales, anastomosing with reniform; reniform centrally maroon, outlined in creamy scales; transverse posterior line undulating, represented as line of demarcation between median and subterminal areas; subterminal area bicolor, basally grey, apically cream yellowish; subterminal line jagged, represented as line of demarcation between cream yellow coloration and grey terminal area; terminal area with transverse black dashes on veins; fringes composed of spatulate white-tipped scales, alternating maroon and brown from apex to point of inner margin, or tornus; inner margin basally and medially with

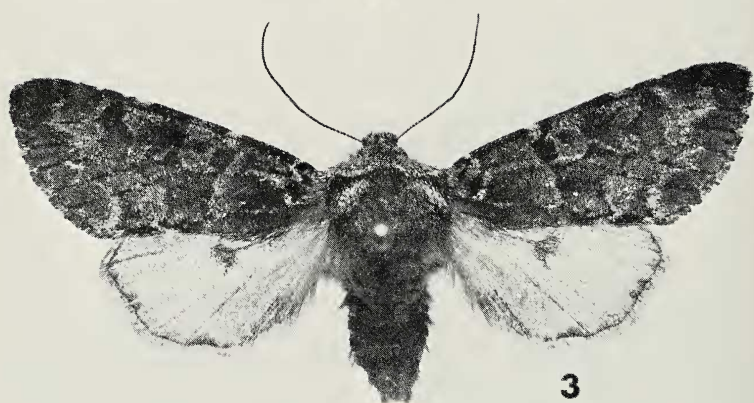


Fig. 2—Holotype male, *Xylomiges baueri*. Inverness, Marin County, California, 6 February 1965 (J. S. Buckett).

Fig. 3—Allotype female, *X. baueri*. Same locality as holotype, 2 February 1962 (J. S. Buckett and G. M. Trenam).

fringe of elongate maroon hairs; ventral surface dark, dusky, costally and apically, basally dirty white, overlain with tint of maroon; dark spot present in area of reniform; secondaries dorsally with pink tint; discal dot dusky, prominent; terminal line dusky; veins slightly outlined in fuscous; fringes a pinkish-maroon; ventral surface pinkish basally; remainder of surface a dirty white, overlain with hue of rose-colored scales; discal dot prominent; suggestion of exterior line, fuscous; a short, faint band of fuscous scales running parallel to exterior line innermarginally; fringes pinkish. Abdomen clothed both dorsally and ventrally in brown and rose colored elongate hairs and paucity of scales. Greatest expanse of forewing \pm 16mm. Genitalia as in figures 4 and 5.

Female: As in male, very little variation, except somewhat larger; antennae ciliate, rather than as in male. Greatest expanse of forewing \pm 18 mm. Genitalia as in figure 6.

SPECIMENS EXAMINED

CALIFORNIA: Holotype male, Inverness, Marin County, 6 February 1965 (J. S. Buckett). Paratypes: 1 female, (designated allotype), Inverness, Marin County, 2 February 1962 (J.S.B. & G. M. Trenam); remainder of paratypes all from Inverness, Marin County, unless otherwise stated; 1 female, 14 February 1950 (W. R. Bauer); 1 female, 14 February 1955 (W.R.B. & J.S.B.); 1 female 31 January 1956 (W.R.B. & J.S.B.); 1 female, 16 February 1960 (W.R.B. & J.S.B.); 1 female, 31 January 1961 (J.S.B.); 1 female, 1 February 1961 (J.S.B.); 2 females, 4 February 1961 (W.R.B. & J.S.B.); 3 males, 3 females, 1 February 1962 (J.S.B. & G.M.T.); 10 males, 6 females 2 February 1962 (J.S.B. & G.M.T.); 4 females, Tomales Bay State Park, Marin County, 6 February 1960 (W.R.B. & J.S.B.); 1 male, Mendocino, Mendocino County, 28 November 1959 (J. R. Helfer).

Holotype deposited in the Type Collection, Department of Entomology, University of California, Davis. Allotype female deposited in the Bauer-Buckett Collection, Davis, California. Remainder of paratypes deposited in the following institutions and collections: American Museum of Natural History, New York; Bauer-Buckett Collection, Davis; California Academy of Sciences, San Francisco; California Department of Agriculture, Sacramento; Franclemont Collection, Ithaca, New York; Los Angeles County Museum of Natural History; United States National Museum, Washington, D.C.; University of California, Berkeley and Davis.

There is also a large series of *Xylomiges baueri* contained in the Franclemont Collection, Cornell University, Ithaca, New York, which was unavailable for study at this time. The specimens of this large series were collected at the same localities as these listed in the "specimens examined" section of the present

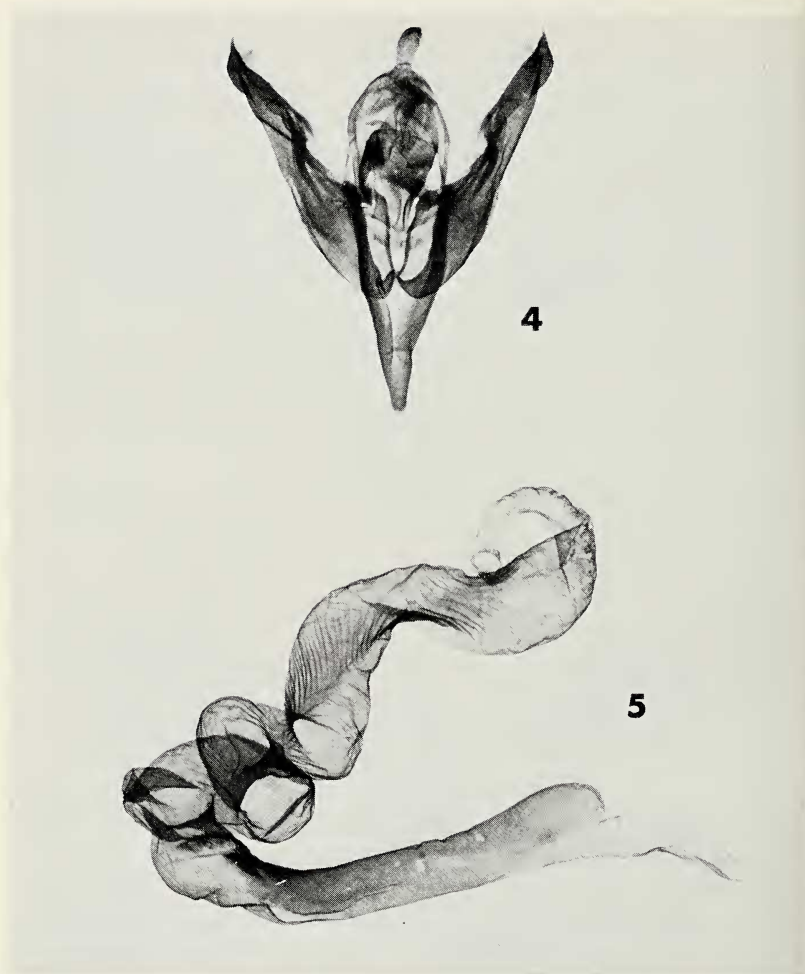


Fig. 4—Paratype, *Xylomiges baueri*. Male genitalia minus aedeagus. Inverness, Marin County, California, 3 February 1962 (J. S. Buckett and G. M. Trenam), Bauer-Buckett Slide No. 65D2-4.

Fig. 5—Paratype, *Xylomiges baueri*. Male aedeagus. Data same as in fig. 4.

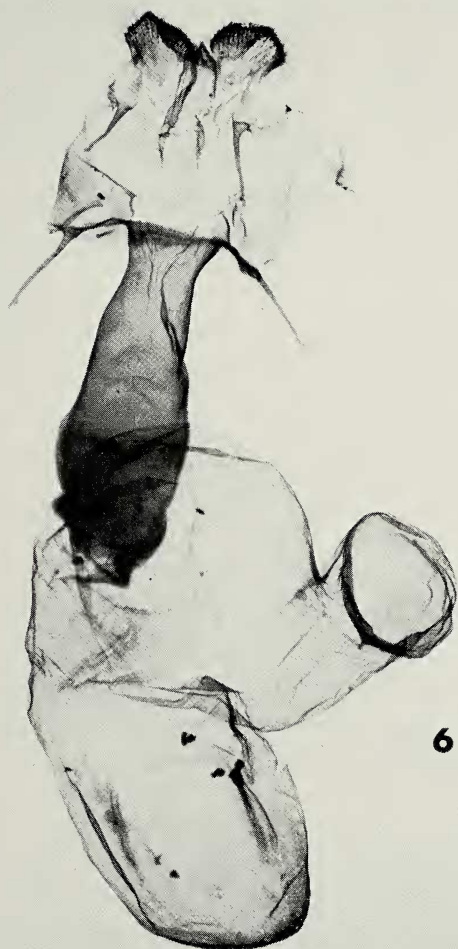


Fig. 6—Paratype, *Xylomiges baueri*. Female genitalia. Locality and collectors same as in fig. 4, 11 February 1962, Bauer-Buckett Slide No. 65D1-2.

work (primarily at Inverness, Marin County), and were collected by the author and colleagues.

Xylomiges baueri is most closely related to *X. variabilis*, as is evidenced by both the male and female genitalia, as well as by maculation of the primaries. In distribution, *baueri* is thus far known to occur in the Central California coastal area, particularly immediately adjacent to the ocean. In the past, *baueri* has not been collected over one air mile from the ocean. This restricted distribution is, no doubt, due to the confined range of its probable host plant, Bishop Pine.

Xylomiges variabilis is not particularly restricted in distribution, as is *baueri*, and it occurs throughout much of the western United States, and at higher elevations (see distribution map). In the Bauer-Buckett collection specimens of *variabilis* are represented from the following localities: Arizona: Madera Canyon, Santa Cruz County. California: Alturas, Modoc County; Benton Station, Mono County; Bishop, Inyo county; Cobb Mountain, 8 miles northwest of Middleton, Lake County; Fish Camp, Madera County; Johnsville, Plumas County; Markleville, Alpine County; Mohawk, Plumas County; Pinyon Crest, Riverside County; Valyermo, Los Angeles County. Utah: Dividend, Utah County; Eureka, Juab County; Provo, Utah County. Due to the distribution of both species, it seems more probable that *variabilis* was an earlier occurring species evolutionarily speaking, and that it could have even given rise to *baueri*.

Mr. William R. Bauer of this Bureau was the first person known to discover this undescribed entity, and therefore, I take great pleasure in naming it in his honor.

REFERENCES

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